



PATENT ABSTRACTS OF JAPAN

(11) Publication number: 09014385 A

(43) Date of publication of application: 14.01.97

(51) Int. Cl

F16H 37/06
H02K 7/116

(21) Application number: 07169429

(71) Applicant: **TOYOTA MOTOR CORP**

(22) Date of filing: 05.07.95

(72) Inventor: **YOSHII KINYA**
KOIDE TAKEJI

(54) DRIVE DEVICE FOR VEHICLE

a transmission gear ratio becomes 1.

(57) Abstract:

COPYRIGHT: (C)1997,JPO

PROBLEM TO BE SOLVED: To provide sufficient torque amplifying work, not to necessarily require a transmission, to provide excellent durability, to make device constitution comparatively simple and inexpensive and to generate little speed changing shock.

SOLUTION: A vehicle is smoothly started by smoothly transferring an electric motor 14 to a normally rotating force movement as well as smoothly stopping reverse rotation by regeneratively braking the electric motor 14 in a state where an internal combustion engine 12 is actuated at so that a sun gear 10s is rotated at combined rotating speed No of a centrifugal clutch 18 at the time when a vehicle stops and the electric motor 14 is reversely rotated. Thereafter, when rotating speed of the electric motor 14 is increased while controlling work of the internal combustion engine 12 so that the sun gear 10s continues to rotate at the combined rotating speed No, rotating speed of a ring gear 10r gradually reaches the combined rotating speed No, a carrier 10c and the ring gear 10r are integrally connected to each other by the centrifugal clutch 18 and

